

FOREVER ACTIVE

PERSONALIZED FITNESS AND WELLNESS FOR MEN 50+

Osteoarthritis

Introduction

Arthritis is the major cause of physical disability in older adults. It is estimated that 1 in 6 Canadians suffer from arthritis and over 80% of older adults have some form of arthritis.

There are over 100 different types of arthritis which fall into two main groups:

- **Osteoarthritis**—is caused by a breakdown of cartilage in joints causing bones to rub together resulting in pain, stiffness and eventual loss of use. There are some forms of osteoarthritis that appear to be genetically driven, but the majority are a result of injury, overuse or advanced age. The latter is the result of atrophy of the muscles, and weakening of the ligaments whose function is to support and protect the joints, during use. The weight bearing joints of the lower back and neck, hips, knees and ankles, are the most vulnerable followed by the small joints of the hands and then the shoulder joints.
- **Inflammatory arthritis**—is a general term used to describe autoimmune forms of the disease. In inflammatory arthritis, the body's own immune system attacks healthy joints and tissues, causing inflammation and joint damage. Rheumatoid Arthritis is the most common form of inflammatory arthritis affecting the small joints of the hand most frequently. Other forms include Ankylosing Spondylitis, Psoriatic Arthritis, and Lupus.



Arthritis affects more adults than cancer, heart disease, respiratory conditions and spinal cord trauma, and has a serious impact on quality of life. Arthritis disables two to three times more workers than all other chronic conditions. Disability associated with arthritis costs the Canadian economy about \$4.4 billion/year.

This newsletter will focus on the most common form of arthritis that affects the older adult, Osteoarthritis.

Did you Know

Nutrition: Anti-inflammatory Foods that Fight Arthritis

Rheumatoid Arthritis is the most common type of inflammatory arthritis, but all types of arthritis have an inflammatory component. When it comes to diet, research has shown that anti-inflammatory foods and nutrients have been shown to lower the inflammatory response. These include:

1. Oily fish - salmon, herring, mackerel, trout, black cod contain high amounts of omega-3 fatty acids. Try to have 3.5 ounces at least once per week.
2. Mediterranean Diet - This diet is rich in fruits, vegetables, legumes, olive oil and little red meat. All these foods provide a large amount of good (monounsaturated) fat), antioxidants, vitamins and minerals.
3. Nuts and Seeds - including one ounce of nuts (24 almonds, 20 hazelnuts, 18 cashews, 7 walnuts or 28 peanuts) in your daily diet provides significant amounts of unsaturated fat, magnesium & anti-oxidants.
4. Vitamin C - citrus fruit, cantaloupe, kiwi, mango, strawberries, cauliflower, red & green bell peppers, brussels sprouts, broccoli
5. Vitamin D - immune regulating nutrient and has anti-inflammatory effects. Daily recommendation is between 600—2000IU per day .

Foods to Avoid

Refined sugar and processed foods which are high in trans-fats.

Choosing the Right Physical Activity for People with Joint Issues

It is generally accepted that regular exercise is necessary to maintain joint mobility and to strengthen the muscles, tendons and ligaments in order to protect against the wear and tear on the joints that will lead to the development of arthritis. However, there has been controversy for years as to what type of exercise if any exercise at all, is best for people who already suffer from joint pain as the result of arthritis.

Recent research from McMaster University suggest that in the long term, doing too little may be as bad as doing too much exercise. Here is the reason: the cartilage in the joint is not an inert padding but is capable of adapting and getting stronger in response to regular use. This fits with multiple long - term running studies that have shown that runners are less likely to develop osteoarthritis in their knees and hips than non-runners. The reasons



for this are probably multi factorial. First, running is a great aerobic exercise and valuable in controlling weight gain. Less weightless pressure on the knees and hips. Second, running helps strengthen the supporting structures, muscles, tendons and ligaments, around the joint. The stronger the supporting tissues the less stress / load is transmitted to the joints. Third is the adaptation effect of the cartilage to repetitive loads. Similar to bones and muscles, if you don't use it you lose it.



So what does this all mean? The overall advice for those with osteoarthritis is the same advice for the general population. Stay active, mix and strength and aerobic exercises that don't aggravate your affected joints. As well, when you exercise start **low and slow** to give your body time to physically adapt to the physical stresses you are putting it under. This means that the more unfit you are when you start, the lower the intensity of the exercise and the slower you progress. The number



one reason people stop exercising on a regular basis is that they hurt themselves within the first month of starting. This is even more true for individuals that have injured or arthritic joints before they start.

It is also important to remember that the benefit of exercise is very specific. Even though cycling and running or walking are great aerobic exercises and strengthen the



heart, they each strength the leg muscles differently. Therefore if you have cycled for years and then decide to start running, start low and slow because the muscles, tendons and ligaments will not be conditioned to handling the stress of running. They are just not "work hardened" to withstand this new stress.



Summary

Exercising is not contraindicated for those who suffer from Osteoarthritis. Regardless of whether the arthritis is in the hands, knees or hips, (the three most common areas osteoarthritis affects the older adult), mobility / flexibility exercises, muscular strengthening exercises and aerobic exercises are important and effective in slowing arthritis' debilitating functional effects. Find the type of exercises that you can perform painlessly. Monitor your discomfort level. Pain in a joint is a great barometer that you are either doing the wrong exercise or doing it too much or too hard. "Low and slow" is your guiding light to safe and effective exercising, especially when you are exercising arthritic joints.

Specific Mobility and Strengthening Exercises for Arthritic Joints

Knee Exercises and Stretching

Quadricep Strengthening Exercises

1. Squeeze the Quads 2. Straight Leg Raise



Advanced

1. Leg Extensions 2. Static Wall Squat



Hamstring Stretches



Hip Exercises and Stretching

1. Hip Abductions 2. Hip Adduction



3. Hip Flexion 4. Hip Extension



Stretches

Hip Flexors

Hip Extensors



Shoulder Exercises and Stretching

Shoulder Shrugs

Shoulder Abductions

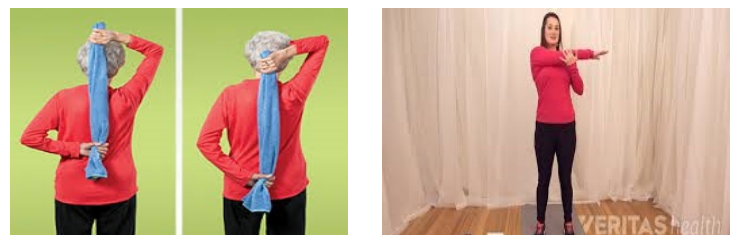


External Rotation

Rotations



Stretches



Lower Back Exercises and Stretches

Cat and Cow Mobility

The Bird

